

(REFERENCE COPY - Not for submission)

FCC Form 399: Reimbursement Request

Facility 23935 Service: DTV Call WMUM-TV Channel:

ID: Sign:9 (High VHF) File 0000027593

Number:

FRN: **0001844976** Date **04/05**

Submitted: /2021

Applicant Information

Applicant Name, Type, and Contact Information

Applicant	Address	Phone	Email	Applicant Type
GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION	260 14TH ST NW ATLANTA, GA 30318 United States	+1 (404) 685- 2400	elaprade@gpb. org	Government Entity

Reimbursement Contact Name and Information

Contact		A 11	DI	F 1
Information	Applicant	Address	Phone	Email
	[Confidential]			

Preparer Contact Information

Preparer Contact Name and Information

Applicant	Address	Phone	Email
Robert Gehman ConsultingEngineer Kessler and Gehman Associates, Inc.	Robert Gehman 507 NW 60 Street Suite D Gainesville, FL 32607 United States	+1 (352) 332-3157	bob@kesslerandgehman. com

Broadcaster Information and Transition Plan

Question	Response
Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information.	No
Briefly describe transition plan	New transmitter and Main antenna using existing transmission line. Mapping, analysis, design of pre-EIA-222-G tower, and possible tower modifications. Interim antenna and line for use during Main antenna replacement and duration of assigned phase.

Transmitters

rs	Section	Question	Response
	Transmitter Related Expenses	Do you have transmitter related expenses?	Yes

Primary Transmitter

Existing Transmitter Information

Section	Question	Response
Existing Transmitter Description	Type of change	Purchase New
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is this transmitter currently shared with another station?	No
	Is this transmitter currently in operating condition?	Yes
Existing Transmitter	Manufacturer	
Manufacturer and Type	Model	PTCD20P2
	Year	2008
	Туре	Solid State
	Solid State Cooling	Air Cooled
	Solid State Power Capacity	8 kW

Primary Transmitter

New Transmitter Costs

Section	Question	Response
New Transmitter	Use	Primary (Main)
	Change Type	Purchase New
	Is this a request for upgraded equipment?	Yes
	Manufacturer	
	Model	HPTV-PRLX- V11
	Transmitter Type	Solid State
	Solid State Cooling	Liquid Cooled
	Solid State Power capacity	15.9 kW
	Justification for New Transmitter	Manufacturer of existing transmitter advises that the existing transmitter cannot be retuned to the assigned channel. See Attachment.

Primary Transmitter

Other Transmitter Costs

Section	Question	Response
Electrical Service	Service Entrance (3 phases 800A 208V)	No
	Switchgear (industrial 800 amp)	Yes
	Transformer (480V)	Yes
	Power	150 kVA
	Rigid Conduit and Wiring	Yes
	Size	3 inches

	Length	100.0 feet
	Other Electrical Service	No
	Description	N/A
HVAC Service	Does the replacement transmitter require HVAC Service?	No
	Туре	N/A
	Size	N/A
	Other Size	N/A
Transmitter Building Addition/Modification or Leasehold Improvement	Does the Transmitter Building require an addition, modification, other leashold improvement?	No
	Size	N/A
Channel 14 Costs	Is an RF Consulting Engineer needed?	N/A
	Is a channel 14 Mask Filer needed?	N/A
	Is additional field engineering time needed?	N/A
	Number of Days	N/A

Primary Transmitter

Other Transmitter Cost Not Listed

Name	Description
Standby Exciter and Switch	Standby Exciter with Automatic Change Over Switch
Additional Interior RF System	Interior RF System Existing Transmitter to Interim Transmission line

Antennas

Section	Question	Response
Antenna Related Expenses	Do you have antenna related expenses?	Yes

Existing Antenna Information

Section	Question	Response
Existing Antenna Description	Type of change	Purchase New
	Antenna Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing antenna shared with another station or stations?	No
	Is the existing antenna directional?	No
	Is antenna in operating condition?	Yes
	Is antenna located on or in close proximity to an antenna farm?	No
Existing Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels	N/A
	Design power capacity in use	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	28.0 kW

Manufacturer	
Model	TLS-V8
Year	2008

New Antenna Costs

Description Description of Use N/A	Section	Question	Response
Description of Use N/A Change Type Purchase New Is this a request for upgraded equipment? Yes Ownership Owned Owner N/A Is antenna shared? No Is antenna directional? No Will antenna be located on or in close proximity to an antenna farm? New Antenna Manufacturer and Types Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Other Antenna Type N/A ERP: (Effective Radiated Power) 31.0 kW Manufacturer		Use	Primary (Main)
Is this a request for upgraded equipment? Yes Owner Owner Owner N/A Is antenna shared? No Is antenna directional? No Will antenna be located on or in close proximity to an antenna farm? New Antenna Manufacturer and Types Class Full Power Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) 31.0 kW Manufacturer	Description	Description of Use	N/A
Ownership		Change Type	Purchase New
Owner N/A Is antenna shared? No Is antenna directional? No Will antenna be located on or in close proximity to an antenna farm? Class Full Power Mounting Side Mount Antenna position in stack Not in Stack Polarization Elliptical Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) 31.0 kW Manufacturer		Is this a request for upgraded equipment?	Yes
Is antenna shared? Is antenna directional? No Will antenna be located on or in close proximity to an antenna farm? Class Mounting Antenna position in stack Polarization Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays Lower Limit Upper Limit N/A Other Antenna Type No No No No Polarization Elliptical N/A N/A No N/A N/A N/A Upper Limit N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Ownership	Owned
Is antenna directional? Will antenna be located on or in close proximity to an antenna farm? Class Mounting Antenna position in stack Polarization Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays Lower Limit Upper Limit Design power capacity in use Not Not Not Not Not Not Not in Stack Polarization Full Power Full Power Full Power Not in Stack Not in Stack Polarization V/A N/A N/A N/A Number of Stations Supported N/A N/A Upper Limit N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Owner	N/A
Will antenna be located on or in close proximity to an antenna farm? Class Mounting Antenna position in stack Polarization Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays Lower Limit Upper Limit Design power capacity in use Not in Stack Not in Stack Rull Power Full Power Full Power Full Power Full Power Full Power Not in Stack Not in Stack Polarization Full Power Full Power Antenna Stack Not in Stack Polarization Type Slotted Coaxial N/A N/A N/A Upper Limit N/A Other Antenna Type N/A ERP: (Effective Radiated Power) 31.0 kW Manufacturer		Is antenna shared?	No
New Antenna Manufacturer and Types Class Mounting Antenna position in stack Polarization Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays Lower Limit Upper Limit N/A Design power capacity in use N/A Other Antenna Type Manufacturer Pull Power Full Power Full Power Full Power Full Power Side Mount Not in Stack Not in Stack Polarization Elliptical N/A N/A N/A N/A N/A N/A Upper Limit N/A Other Antenna Type N/A Stations Supported N/A N/A Upper Limit N/A Other Antenna Type N/A Manufacturer		Is antenna directional?	No
Manufacturer and Types Mounting Antenna position in stack Polarization Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit Upper Limit N/A Design power capacity in use N/A Other Antenna Type RPP: (Effective Radiated Power) Manufacturer			No
Mounting Antenna position in stack Polarization Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type ERP: (Effective Radiated Power) Manufacturer		Class	Full Power
Polarization Elliptical Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) 31.0 kW	Manufacturer and Types	Mounting	Side Mount
Type Slotted Coaxial Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Antenna position in stack	Not in Stack
Number of Stations Supported N/A Number of Panels/Bays N/A Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Polarization	Elliptical
Number of Panels/Bays Lower Limit N/A Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Туре	
Lower Limit Upper Limit N/A Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Number of Stations Supported	N/A
Upper Limit Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Number of Panels/Bays	N/A
Design power capacity in use N/A Other Antenna Type N/A ERP: (Effective Radiated Power) 31.0 kW Manufacturer		Lower Limit	N/A
Other Antenna Type N/A ERP: (Effective Radiated Power) Manufacturer		Upper Limit	N/A
ERP: (Effective Radiated Power) 31.0 kW Manufacturer		Design power capacity in use	N/A
Manufacturer		Other Antenna Type	N/A
		ERP: (Effective Radiated Power)	31.0 kW
Model JSM-10/9		Manufacturer	
SEO-V-R		Model	

Year	2018
Justification for New Antenna	The existing primary antenna is a single channel slotted coaxial which cannot accommodate the assigned channel.

Other Antenna Costs

Section	Question	Response
Combiner for Shared Antenna	Do you need a Combiner for a Shared Antenna?	
	Туре	
	Number of channels supported	N/A
	Frequencies of channels supported	N/A
	Frequency	N/A
	Do you need a combiner output splitter /switcher for dual feed lines?	N/A
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for a high power antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Other Antenna Cost Not Listed

Information not provided.

Interim Antenna

New Antenna Costs

Section	Question	Response
New Antenna Description	Use	Interim
	Description of Use	N/A
	Change Type	Purchase New
	Ownership	Owned
	Owner	N/A
	Is antenna shared?	No
	Is antenna directional?	No
	Will antenna be located on or in close proximity to an antenna farm?	No
New Antenna	Class	Full Power
Manufacturer and Type	Mounting	Side Mount
	Antenna position in stack	Not in Stack
	Polarization	Horizontal
	Туре	Slotted Coaxial
	Number of Stations Supported	N/A
	Number of Panels/Bays	N/A
	Lower Limit	N/A
	Upper Limit	N/A
	Design power capacity in use	N/A
	Other Antenna Type	N/A
	ERP: (Effective Radiated Power)	28.0 kW
	Manufacturer	
	Model	JSM-8 /9SHO-V
	Year	2018

Justification for New Antenna	An interim
	antenna is
	necessary
	to keep
	station on
	the air
	during
	primary
	antenna
	replacement
	and for the
	duration of
	the
	assigned
	phase.
	Station will
	attempt to
	lease if
	leasing is
	available at
	time of
	acquisition.

Interim Antenna

Other Antenna Costs

Section	Question	Response
Elbow Complex	Do you require the separate purchase of the Elbow Complex?	No
	Broadband or Single Channel?	N/A
	Feed Line Size	N/A
Side Mount Brackets	Do you require the separate purchase of side mount brackets for an antenna?	Yes
Pattern Scatter Analysis	Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna?	Yes
Sweep Test	Do you require the sweep testing of transmission line and antenna?	Yes

Interim Antenna

Other Antenna Cost Not Listed

Information not provided.

Transmission Section Question Response Line Transmission Line Related Expenses Do you have transmission line related expenses? Yes

Existing Transmission Line

Primary '	
Transmission	ıs
Line	Ĭ

Section	Question	Response
Existing Transmission Line Description	Type of change	Utilize Existing
	Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Owner	N/A
	Site	N/A
	Is the existing transmission line shared with another station or stations?	No
	Is Transmission Line in operating condition?	Yes
Existing Transmission Line Manufacturer and	Manufacturer	ERI
Line Manufacturer and Type	Туре	Flexible Air
	Diameter	3 inches
	Other Diameter	N/A
	Segment Length	N/A
	Other Segment Length	N/A
	Number of parallel runs	1
	Length	1120 feet per run

Other Transmission Line Expenses Not Listed

Primary	Other Transmission Line Expenses No	ot Listed
Transmission Line	^N Name	Description
	Sweep	Verify line performance on new channel

Interim	New Transmission Line		
Transmissio Line	n _{Section}	Question	Response
Line	New Transmission Line	Use	Interim
	Costs	Description of Use	N/A
		Change Type	Purchase New
		Туре	Flexible Air
		Diameter	3 inches
		Segment Length	N/A
		Other Segment Length	
		Number of parallel runs	1
		Length	865 feet per run
		Justification for New Transmission Line	An interim transmission line is necessary for the interim antenna to keep station on the air during primary antenna replacement and for the duration of the assigned

phase.

Other Transmission Line Expenses Not Listed

Interim Other Transmission
Transmission of provided.

Line

Tower Equipment And Rigging Costs

Section	Question	Response
Tower Equipment or Rigging Costs Changes	Do you have tower equipment or rigging costs changes?	Yes

Primary Tower

Existing Tower

Section	Question	Response
Existing Fower	Type of change	Modify Existing
escription	Tower Use	Primary (Main)
	Description of Use	N/A
	Ownership	Owned
	Is this tower consider Complex?	No
	Is this tower currently shared with any other stations?	Yes
	One or more FM, AM or TV radio broadcaster(s)	Yes
	Others Types of Users	Yes
	Is tower documented for structural analysis?	No
	Is tower compliant with Rev G?	No
Existing	Do you have a tower registration number?	Yes
Tower Structure Registration	ASR Number	1018798
Coordinates	Latitude (NAD83)	32° 28′ 12.2″ N-
NAD83 (North	Longitude (NAD83)	083° 15' 18.0" W-
American Datum of	Overall Structure Height	1168.95 feet
1983))	Support Structure Height	1109.89 feet
	Ground Elevation Above Mean Sea Level (AMSL)	398.95 feet

Structure Type	GTOWER - Guyed Structure Used for Communication Purposes
Tower Owner	GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION
Date Constructed	03/02/2016

FM, AM or TV radio broadcasters. Facility ID's, Call Signs and Services of other broadcast stations with whom the tower is shared

Facility ID	Call Sign	Service
43212	WMAB-FM	FM

Other Types of Users

Users	
WMAB ICR	

Primary Tower

Tower Modification Costs

Section	Question	Response
Engineering Study	Please what type of engineering study is required, if any:	Study needed for undocumented /poorly documented tower
Tower Reinforcements	Please select whether tower reinforcements are needed:	Major Reinforcements needed

Primary Tower

Tower Rigging Costs

Section	Question	Response
Tower Rigging Costs	Complex Tower	N/A

Helicopter Services	Are helicopter services required?	No
Required		

Primary Tower

Other Tower Expenses Not Listed

Name	Description
Temporary load letter	Temporary load letter

Outside Professional Services Costs

Section	Question	Response
Outside Project Management Services	Do you require outside project management services?	Yes
	Number of Hours	60
	Explanation	It will be necessary to schedule and coordinate multiple vendors, complete progress reports, and update Schedule 399. Station does not have available personnel or personnel trained in project management for such complex projects.
Outside RF consulting Engineering Services	Perform engineering study for new channel assignment and antenna development	Yes
	Prepare engineering section of Form FCC Construction Permit Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare engineering section of Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes

	Quantity	1
	Do you have Distributed Transmission System engineering services?	N/A
	Critical Facility	N/A
	Terrain-Shielded Facility	N/A
Attorney and Other Outside Consulting	Prepare and file Form FCC Construction Permit Application	Yes
Services	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare and file Form FCC License to Cover Application	Yes
	For Auxiliary Facility	No
	For Main Facility	Yes
	Prepare request for Special Temporary Authority	Yes
	Quantity	1
	NEPA Section 106 environmental review	No
	Environmental Assessment	No
	ASR Modification	No
	FAA Consultation (including preparation of FAA Form 7460)	No
	Negotiation of Lease and other Matter for Shared Locations	No
	Prepare or Review FCC Form 399 for Reimbursement	Yes
	Address transition timing and coordination issues w/ other stations and wireless providers	Yes
RF Field Engineering Services	Comprehensive coverage verification via field study	No
	RF exposure measurements	No
	Additional Field Engineering Service	Yes

Number of Days	15
Justification	It will be necessary to survey the site, plan the equipment, develop specifications for purchasing, and oversee multiple vendor RF projects. Station does not have available personnel or personnel trained in such services.

Outside Professional Services Costs

Other Professional Services Expenses Not Listed

al	Name	Description	
	Other Legal Services	Legal services not already included in a pre- established OPS section.	
	Other Engineering Services	Engineering services not already included in a pre-established OPS section.	

Other Expenses

Section	Question	Response
AM Pattern Disturbance	Is an Impact Study needed?	No
	Is Remediation needed?	No
Facility Expenses	Name	N/A
	Other Distributed Transmission System Expenses Not listed	N/A
	Name	N/A
	Is Notification of a Medical Facility required as a result of DTV broadcasting?	Yes
Permit and Filing Costs	Local Zoning	No
	Non-zoning permits	No
	BLM or NFS Coordination	No
	FCC Construction Permit Minor Change	No
	FCC License to Cover Application	No
	FCC Special Temporary Authority Application	No
Other Miscellaneous Expenses	Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)?	Yes
	Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs?	Yes
	Does this relocation require Equipment Storage?	Yes
	Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change?	Yes
	Does this relocation require MVPD Notification of a Channel Change?	Yes

Other Expenses

Other Expenses Not Listed

Name	Description
Electrical Design	Electrical Design
System Design and Site Survey	System Design and Site Survey
Electrical Work	Electrical Work

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Transmitter HPTV-PRLX- V11	\$483,430.00	\$479,980.00		\$314,480.00	
Additional Interior RF System	\$75,000.00	\$75,000.00	N/A	N/A	N/A
Standby Exciter and Switch	\$25,000.00	\$25,000.00	N/A	N/A	N/A
3" Rigid Conduit and Wiring (Cost per foot)	\$5,200.00	\$4,900.00	N/A	N/A	N/A
Switchgear - industrial 800 amp	\$38,200.00	\$36,300.00	N/A	N/A	N/A
High VHF - Liquid Cooled Solid State Transmitter 15.9 kW	\$314,480.00	\$314,480.00	This transmitter is an Upgrade. See attached uploaded file "Comark S10458-1 v190911jgv1. pdf"	\$314,480.00	N/A
Transformer 3 phase /480v - 150 KVA	\$25,550.00	\$24,300.00	N/A	N/A	N/A
Sub-total	\$483,430.00	\$479,980.00	N/A	\$314,480.00	N/A

Total for all \$1,797,434.50 \$1,804,463.50 N/A \$1,408,946.00 N/A **systems**

Components

Actual Information Description	File Name	
Additional Interior RF System	Information not provided.	
Standby Exciter and Switch	Information not provided.	
3" Rigid Conduit and Wiring (Cost per foot)	Information not provided.	
Switchgear - industrial 800 amp	Information not provided.	
High VHF - Liquid Cooled Solid State Transmitter 15.9 kW	Component Description: Amount:	Comark S10458-1 v190912jgv2 \$314,480.00
Transformer 3 phase/480v - 150 KVA	Information not provided.	

Cost Information

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Interim Antenna JSM-8 /9SHO-V	\$170,880.00	\$169,140.00		\$135,740.00	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
High VHF - High Power Side Mount One Station horizontally polarized	\$135,740.00	\$135,740.00	See attached / uploaded PDF file titled "Jampro 1 v200416jgv1. pdf"	\$135,740.00	N/A

Primary Antenna JSM-10/9 SEO-V-R	\$215,470.00	\$213,730.00		\$180,330.00	
Side mount brackets for high power antennas (if not included in antenna base cost)	\$23,150.00	\$22,000.00	N/A	N/A	N/A
Sweep test of existing antenna	\$6,730.00	\$6,400.00	N/A	N/A	N/A
High VHF - High Power Side Mount One Station elliptically or circularly polarized	\$180,330.00	\$180,330.00	See attached / uploaded PDF file titled "Jampro 4 v210203jgv1. pdf"	\$180,330.00	N/A
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	\$5,260.00	\$5,000.00	N/A	N/A	N/A
Sub-total	\$386,350.00	\$382,870.00	N/A	\$316,070.00	N/A
Total for all systems	\$1,797,434.50	\$1,804,463.50	N/A	\$1,408,946.00	N/A

Actual Information Description	File Name	
Pattern scatter analysis for side mount high/med power antennas (if not included in antenna base cost)	Information not provided.	
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Sweep test of existing antenna	Information not provided.	
High VHF - High Power Side Mount One Station horizontally polarized	Component Description: Amount:	Jampro 4 v210203jgv1 \$10,100.00
	Component Description:	Jampro 1
	Amount:	v201204jgv5 \$70,752.00
	Component Description:	Jampro 2 v201230jgv1
	Amount:	\$49,258.00
	Component Description:	Jampro 3 v201230jgv1
	Amount:	\$5,630.00
Side mount brackets for high power antennas (if not included in antenna base cost)	Information not provided.	
Sweep test of existing antenna	Information not provided.	

High VHF - High Power Side Mount One Station **Component Description:** Jampro 2 elliptically or circularly v201230jgv1 polarized \$64,981.50 **Amount: Component Description:** Jampro 4 v210203jgv1 **Amount:** \$19,330.80 **Component Description:** Jampro 1 v201204jgv5 **Amount:** \$67,657.80 **Component Description:** Jampro 3 v201230jgv1 **Amount:** \$17,719.90 **Component Description:** Jampro 4 v210203jgv1 **Amount:** \$10,640.00 Pattern scatter analysis for Information not provided. side mount high/med power antennas (if not included in antenna base cost)

Cost Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description Interim Transmission Line	Predetermined Cost Estimate \$51,035.00	Estimated Cost \$47,402.00	Estimated Cost Justification	Actual Cost \$47,402.00	Actual Cost Justification
Flexible Air Transmission Line - dielectric, 3"	\$51,035.00	\$47,402.00	See attached / uploaded PDF file titled "Jampro 1 v200416jgv1. pdf"	\$47,402.00	N/A
Primary Transmission Line	\$6,400.00	\$6,400.00		\$0.00	
Sweep	\$6,400.00	\$6,400.00	N/A	N/A	N/A
Sub-total	\$57,435.00	\$53,802.00	N/A	\$47,402.00	N/A
Total for all systems	\$1,797,434.50	\$1,804,463.50	N/A	\$1,408,946.00	N/A

Components

Actual Information Description	File Name	
Flexible Air Transmission Line - dielectric, 3"	Component Description: Amount:	Jampro 1 v201204jgv5 \$47,402.00
Sweep	Information not provided.	

Cost Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Primary Tower GTOWER	\$659,300.00	\$665,500.00		\$575,000.00	
Major tower reinforcement /modifications	\$421,000.00	\$400,000.00	N/A	\$309,500.00	N/A
Tall Tower (greater than 500')	\$210,500.00	\$215,600.00	See attached / uploaded PDF file titled "Jampro 1 v200416jgv1. pdf"	\$215,600.00	N/A
Temporary load letter	<i>\$1,500.00</i>	\$1,500.00	See attached / uploaded PDF file titled "TEP 443228 v200924jgv1. pdf"	\$1,500.00	N/A

Tower	\$26,300.00	\$48,400.00	See	\$48,400.00	N/A
mapping for			attached /		
an			uploaded		
undocumented			PDF files		
/poorly			titled "TEP		
documented			369159		
tower and			v200305jgv1.		
preparation of			pdf", "TEP		
documentation			388694		
necessary for			v200305jgv1.		
tower load			pdf", "TEP		
study			391347		
			v200305jgv1.		
			pdf", "TEP		
			391368		
			v200305jgv1.		
			pdf", "TEP		
			423209		
			v200415jgv1.		
			pdf" and		
			"Haralson		
			180665		
			v210330jgv1.		
			pdf"		
Sub-total	\$659,300.00	\$665,500.00	N/A	\$575,000.00	N/A
Total for all systems	\$1,797,434.50	\$1,804,463.50	N/A	\$1,408,946.00	N/A

Components

Actual Information Description	File Name	
Major tower reinforcement /modifications	Component Description: Amount:	TEP 419765 v200615jgv1 \$90,000.00
	Component Description: Amount:	TEP 463525 v201208jgv1 \$20,000.00

Component Description: TEP 466766

v201207jgv1

Amount: \$48,000.00

Component Description: TEP 458571

v201207jgv1

Amount: \$3,500.00

Component Description: TEP 470990

v201207jgv1

Amount: \$3,500.00

Component Description: TEP 466763

v201207jgv1

Amount: \$48,000.00

Component Description: TEP 466765

v201207jgv1

Amount: \$48,000.00

Component Description: TEP 466764

v201207jgv1

Amount: \$48,000.00

Component Description: TEP 458573

v201207jgv1

Amount: \$27,500.00

Component Description: TEP 458572

v201207jgv1

Amount: \$48,000.00

Component Description: TEP 466767

v201207jgv1

Amount: \$1,500.00

	Component Description:	TEP 419764
		v200615jgv1
	Amount:	\$20,000.00
	Component Description:	TEP 463564
		v201208jgv1
	Amount:	\$13,500.00
Tall Tower (greater than		
500')	Component Description:	Jampro 2
		v201230jgv1
	Amount:	\$53,900.00
	Component Description:	Jampro 4
		v210203jgv1
	Amount:	\$53,900.00
	Component Description:	Jampro 4
		v210203jgv1
	Amount:	\$53,900.00
	Component Description:	Jampro 2
		v201230jgv1
	Amount:	\$53,900.00
Temporary load letter		
	Component Description:	TEP 443228
		v200924jgv1
	Amount:	\$1,500.00

Tower mapping for an undocumented/poorly documented tower and preparation of documentation necessary for tower load study

Component Description: Haralson 180665

v210330jgv1

Amount: \$1,200.00

Component Description: TEP 391368

v200305jgv1

Amount: \$4,200.00

Component Description: TEP 423209

v200415jgv1

Amount: \$19,500.00

Component Description: TEP 388694

v200305jgv1

Amount: \$10,500.00

Component Description: TEP 391347

v200305jgv1

Amount: \$3,500.00

Component Description: TEP 369159

v200305jgv1

Amount: \$9,500.00

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined	Estimated	Estimated Cost	Antical Cont	Actual C
Description Outside	\$104,301.50	\$123,699.50	Justification	\$71,632.00	Justifica
Professional Services	\$101,001.00	V .20,000.00		V 1 1,00 2 100	
Other Engineering Services	\$22,600.00	\$22,600.00	The Estimated Cost includes other engineering services such as RF calculations, evolving transition plan calculations, bid spec prep / distribution / award recommendation / etc and discussion, etc.	\$22,600.00	N/A
Other Legal Services	\$11,511.50	\$11,511.50	Other Legal Services related to the station's DTV Repack	\$11,511.50	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application	\$2,365.00	\$2,250.00	N/A	N/A	N/A
Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application	\$5,260.00	\$5,000.00	N/A	\$1,732.50	N/A

Prepare request for Special Temporary Authorization	\$2,050.00	\$1,553.00	See attached / uploaded PDF file titled "KGA 554-839 v201207jgv1.pdf"	\$1,553.00	N/ <i>i</i>
Prepare engineering section of FCC Form 2100 (main), License to Cover Application	\$1,580.00	\$1,500.00	N/A	\$750.00	N/
Prepare engineering section of FCC Form 2100 (main), Construction Permit Application	\$3,155.00	\$3,975.00	See attached / uploaded PDF files titled "KG 554-482 WMUM- R.pdf" and "KGA 554-874 v201207jgv1.pdf"	\$3,975.00	N/
Perform engineering study for new channel assignment and antenna development	\$7,360.00	\$7,000.00	N/A	\$3,500.00	N/
Address transition timing and coordination issues w/ other stations and wireless	\$2,630.00	\$2,500.00	N/A	N/A	N/
Prepare and or review reimbursement form	\$2,630.00	\$23,310.00	The Estimated Cost includes Form 399 submissions including ongoing Actual Cost invoice prep and submission, and amendments as needed.	\$23,310.00	N/

Project management of the transition	\$9,480.00	\$9,000.00	Fewer Project Management tasks are required & Other Engineering Services "OES" are required, therefore the PM total has been reduced and a new OES category has been created and funded with the money removed from PM.	\$2,700.00	N/A
Additional Field Engineering Service, 15 Days	\$30,000.00	\$30,000.00	N/A	N/A	N/A
Attorney Fees - Prepare and File request for Special Temporary Authorization	\$3,680.00	\$3,500.00	N/A	N/A	N/A
Sub-total	\$104,301.50	\$123,699.50	N/A	\$71,632.00	N/A
Total for all systems	\$1,797,434.50	\$1,804,463.50	N/A	\$1,408,946.00	N/A

Components

Actual Information Description	File Name	
Other Engineering Services		
	Component Description:	KGA 554-970
		v210405jgv1
	Amount:	\$150.00

v210405jgv1

Amount: \$700.00

Component Description: KGA 554-945

v210405jgv1

Amount: \$75.00

Component Description: KGA 554-918

Amount:

Amount:

v210405jgv1 \$1,025.00

Component Description: KGA 554-907

v210405jgv1 **Amount:** \$2,625.00

Component Description: KGA 554-611

v190620pmv1

Amount: \$800.00

Component Description: KGA 554-885

v201204jgv1 \$1,000.00

Component Description: KGA 554-629

v190620pmv1

Amount: \$2,525.00

Component Description: KGA 554-612

v190620pmv1

Amount: \$700.00

Component Description: KGA 554-698

v200218jgv1

Amount: \$2,075.00

v190702pmv1

Amount: \$1,450.00

Component Description: KGA 554-822

v200924jgv1

Amount: \$800.00

Component Description: KGA 554-859

v201204jgv1

Amount: \$250.00

Component Description: KGA 554-778

v200610jgv1 \$900.00

Amount: \$900.00

Component Description: KGA 554-814

Amount:

Amount:

Amount:

v200924jgv1 \$450.00

Component Description: KGA 554-725

v200218jgv1 \$1,500.00

Amount: \$1,500.00

Component Description: KGA 554-848

v201228jgv2 \$1,625.00

Component Description: KGA 554-668

v200218jgv1 \$1,275.00

Component Description: KGA 554-873

v201204jgv1

Amount: \$1,450.00

v200218jgv1

Amount: \$1,225.00

Other Legal Services

Component Description: GMP 33428

v210405jgv1

Amount: \$385.00

Component Description: GMP 33255

v210405jgv1

Amount: \$192.50

Component Description: GMP 30379

v190702pmv1

Amount: \$115.50

Component Description: GMP 32080

v200618pmv1

Amount: \$192.50

Component Description: GMP 32894

v201204jgv1

Amount: \$4,851.00

Component Description: WMUM amount.

Refer to Jan-April

GMP matter

summary. Refer to letter and

attachments

uploaded from GPB

8.2.18

Amount: \$38.50

Component Description: GMP 31276

v200218jgv1

Amount: \$77.00

Component Description: GMP 31513

v200218jgv1 \$385.00

Amount: \$385.00

Component Description: WMUM amount.

Refer to GMP matter summary May 2018. Refer to

letter and attachments

uploaded from GPB

8.2.18

Amount: \$154.00

Component Description: GMP 32753

v201204jgv1

Amount: \$1,848.00

Component Description: GMP 32601

v201204jgv1

Amount: \$77.00

Component Description: GMP 32246

v200618pmv1

Amount: \$231.00

Component Description: WMUM amount.

Refer to GMP master summary invoice WMUM with attached invoice.

\$115.50

Component Description: GMP 32420

Amount:

v200618pmv1

Amount: \$1,963.50

Component Description: GMP 33050 v201204jgv1

Amount: \$539.00

Component Description: GMP 30912

v200218jgv1

Amount: \$192.50

Component Description: Repack Prep legal

Invoices

Amount: \$77.00

Component Description: WMUM amount.

Refer to GMP master summary invoice WMUM with attached invoice.

Amount: \$38.50

Component Description: WMUM amount.

Refer to GMP master summary invoice WMUM with attached invoice.

Amount: \$38.50

Attorney Fees -Prepare and File FCC Form 2100 (main), License to Cover Application Information not provided.

Attorney Fees - Prepare and File FCC Form 2100		NAME IN A
(main), Construction	Component Description:	WMUM amount.
Permit Application		Refer to GMP
		master summary
		invoice WMUM with
		attached invoice.
		Refer to letter and
		attachments
		uploaded by GPB
		8.2.18
	Amount:	\$1,347.50
	Component Description:	WMUM amount.
		Refer to GMP
		master summary
		invoice WMUM with
		attached invoice.
		Refer to letter and
		attachments
		uploaded by GPB
		8.2.18
	Amount:	\$385.00
		, , , , , , , , , , , , , , , , , , ,
Prepare request for Special Temporary	Component Description:	KGA 554-839
Authorization		v201207iav1
Authorization	Amount:	v201207jgv1 \$1.553.00
Authorization	Amount:	v201207jgv1 \$1,553.00
Prepare engineering	Amount:	,-
Prepare engineering section of FCC Form 2100	Amount: Component Description:	• •
Prepare engineering		\$1,553.00

Prepare engineering section of FCC Form 2100	Component Description:	Prepare
(main), Construction		engineering section
ermit Application		of FCC Form 2100
		(main) construction
		permit
	Amount:	\$2,000.00
	Component Description:	KGA 554-874
	Component Description.	v201207jgv1
	Amount:	\$1,975.00
Perform engineering study		
for new channel	Component Description:	Perform
assignment and antenna		engineering study
development		for new channel
		assignment
	Amount:	\$3,500.00
Address transition timing and coordination issues w/other stations and wireless	Information not provided.	
Prepare and or review		
reimbursement form	Component Description:	KGA 554-929
		v210405jgv1
	Amount:	\$1,425.00
	Component Description:	KGA 554-951
		v210405jgv1
	Amount:	\$575.00
	Component Description:	KGA 554-958
	- Simpononi Dosoriptioni	v210405jgv1
	Amount:	\$2,075.00
	Component Description:	KGA 554-935
	2 2004 2000 2 2000 18110111	v210405jgv1
	Amount:	\$3,925.00
	Amount.	ψ0,320.00

v210405jgv1 \$875.00

Amount: \$875

Component Description: KGA 554-875

v201204jgv1

Amount: \$200.00

Component Description: KGA 554-656

v200610jgv1

Amount: \$410.00

Component Description: KGA 554-784

v200415jgv1

Amount: \$850.00

Component Description: Prepare and review

reimbursement form

Amount: \$2,500.00

Component Description: KGA 554-648

v190702pmv1

Amount: \$50.00

Component Description: KGA 554-799

v200618pmv1

Amount: \$2,500.00

Component Description: KGA 554-610

v190620pmv1

Amount: \$275.00

Component Description: KGA 554-784

v200618pmv1

Amount: \$850.00

v190620pmv1

Amount: \$145.00

Component Description: KGA 554-682

v200218jgv1

Amount: \$675.00

Component Description: KGA 554-768

v200610jgv1

Amount: \$475.00

Component Description: KGA 554-853

Amount:

Amount:

Amount:

v201204jgv1 \$4,230.00

Component Description: KGA 554-707

v200218jgv1 \$450.00

Component Description: KGA 554-892

v201215jgv2 \$1,450.00

Amount: \$1,450.00

Component Description: KGA 554-808

v200924jgv1 \$175.00

Component Description: KGA 554-629

v190620pmv1

Amount: \$50.00

Project management of the transition

Component Description: Project

management Bob

Gehman

Amount: \$300.00

v201207jgv1

Amount:

\$150.00

Component Description:

Project

management Bob

Gehman

Amount:

\$225.00

Component Description:

KGA 554-764 v200610jgv1

Amount:

\$150.00

Component Description:

KGA 554-711 v200618pmv1

Amount:

\$150.00

Component Description:

KGA 554-789 v200618pmv1

Amount:

\$150.00

Component Description:

Amount:

Form 387 4Q18

\$150.00

Component Description:

KGA 554-749 v200610jgv1

Amount:

\$150.00

Component Description:

KGA 554-598 v190620pmv1b

Amount:

\$150.00

Component Description:

KGA 554-899 v201207jgv1

Amount:

\$150.00

v201207jgv1

Amount:

\$150.00

Component Description: KGA inv #554-554

Form 387 2018 Q3

UL20190426jgv1

Amount: \$150.00

Component Description: KGA 554-863

v201207jgv1

Amount: \$150.00

Component Description:

Amount:

Form 387 2Q18

\$150.00

Component Description: Project

management Bob

Gehman

Amount: \$225.00

Component Description: KGA 554-662

v200218jgv1

Amount: \$150.00

Additional Field Engineering Service, 15

Days

Information not provided.

Attorney Fees - Prepare and File request for **Special Temporary**

Authorization

Information not provided.

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

Description	Predetermined Cost Estimate	Estimated Cost	Estimated Cost Justification	Actual Cost	Actual Cost Justification
Other Expenses	\$106,618.00	\$98,612.00		\$84,362.00	
Electrical Work	<i>\$54,212.00</i>	\$54,212.00	See attached / uploaded PDF file titled "All- State 3712 v200415jgv1. pdf"	\$54,212.00	N/A
System Design and Site Survey	\$15,300.00	\$15,300.00	N/A	\$15,300.00	N/A
Electrical Design	\$8,660.00	\$8,660.00	See attached / uploaded PDF files titled "NBP Eng 18187 v200303jgv1. pdf" and "NBP Eng 18371 v210301jgv1. pdf"	\$8,660.00	N/A
MVPD Notification of Channel Change	\$1,896.00	\$1,896.00	N/A	\$1,896.00	N/A
Develop and air announcement of upcoming channel change	\$0.00	\$0.00	N/A	N/A	N/A

Equipment Storage	\$5,000.00	\$5,000.00	N/A	N/A	N/A
Equipment Delivery and Handling Charges	\$5,000.00	\$5,000.00	N/A	\$750.00	N/A
Disposal Costs (for equipment and other waste, net of any salvage value)	\$5,000.00	\$5,000.00	N/A	N/A	N/A
DTV Medical Facility Notification	\$11,550.00	\$3,544.00	N/A	\$3,544.00	N/A
Sub-total	\$106,618.00	\$98,612.00	N/A	\$84,362.00	N/A
Total for all systems	\$1,797,434.50	\$1,804,463.50	N/A	\$1,408,946.00	N/A

Components

Actual Information Description	File Name	
Electrical Work		
	Component Description:	All-State 3712
		v200415jgv1
	Amount:	\$54,212.00
System Design and Site Survey		
Survey	Component Description:	Comark 12830
		v190911jgv1
	Amount:	\$15,300.00

Electrical Design		
	Component Description:	NBP Eng 18187
	Amount:	v200318jgv2 \$2,960.00
	Amount.	φ2,900.00
	Component Description:	NBP Eng 18371
		v210308jgv2
	Amount:	\$5,700.00
MVPD Notification of		
Channel Change	Component Description:	KGA 554-757
		v200610jgv1
	Amount:	\$1,896.00
Develop and air	Information not provided.	
announcement of upcoming channel change		
Equipment Storage	Information not provided.	
Equipment Delivery and		
Handling Charges	Component Description:	TEP 463565
		v201208jgv1
	Amount:	\$750.00
Disposal Costs (for	Information not provided.	
equipment and other waste, net of any salvage value)		
DTV Medical Facility		
Notification	Component Description:	KGA 554-756
		v200610jgv1
	Amount:	\$3,544.00

Cost Information

Grand Total

	Predetermined Cost Estimate	Estimated Cost	Actual Cost
Total for all systems	\$1,797,434.50	\$1,804,463.50	\$1,408,946.00

Reimbursem	envestion	Response
Status	The facility has ceased operating on its pre- auction channel.	Yes
	Construction of final facilities or all necessary modifications are complete.	No
	All receipts for reimbursement have been submitted no further costs are expected to be incurred. Note this will lock the Form 399 from further editing and begin close-out	No

procedures with the Fund Administrator.

Section Question Response

Submission of Estimated Expenses Statements

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.

- 1. The Authorized
 Person signing
 below certifies that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations.
- 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.

- 4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
- 7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Jeffrey C Gehman Engineering Associate

04/05/2021

Section Question Response

Submission of Actual Cost Documentation Statements

WILLFUL FALSE, FRAUDULENT, OR FICTITIOUS STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISIONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE AND/OR FRAUDULENT STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT (U.S. CODE, TITLE 31, SECTIONS 3729-3733).

- 1. The Authorized
 Person signing
 below certifies and
 represents that he
 /she is authorized to
 submit this TV
 Broadcaster
 Relocation Fund
 Reimbursement
 Form on behalf of
 the above-named
 entity.
- The above-named entity certifies that the statements in this form and attached documentation are true, complete, and correct.
- The above-named entity acknowledges that all certifications and attached documentation are considered material representations.

- 4. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount.
- 5. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (full power and Class A stations) and/or otherwise modify a television station's facility as a result of the spectrum repack (LPTV/TV Translator stations); or to minimize service disruption resulting from a repacked television station (FM stations); or to continue to carry the signal of a broadcaster that changes channels (MVPD).
- 6. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
- 7. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.

- 8. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
- 9. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a prerequisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the abovenamed applicant for the Authorization(s) specified above. Jeffrey C Gehman Engineering Associate

04/05/2021

Attachments